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Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: _____ Examiner #: _____ Date: 8/29/08

Art Unit: _____ Phone Number: 5 _____ Serial Number: 10547840

Location (Bldg/Room): _____ (Mailbox #): _____ Results Format Preferred (circle): PAPER DISK

To assure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: Process for the Production of Substituted Dicarboxylic Acids

Inventors (please provide full names): Jadson, David et al

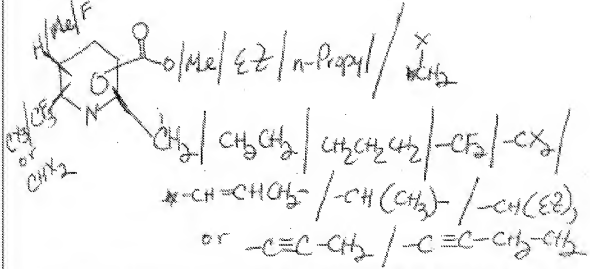
Earliest Priority Date: 3/7/2003

Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known.

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

See claims

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=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 08:42:20 ON 29 AUG 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 29 Aug 2008 VOL 149 ISS 10
FILE LAST UPDATED: 28 Aug 2008 (20080828/ED)

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate
substance identification.

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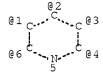

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STEREO ATTRIBUTES: NONE
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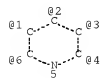

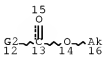

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NUMBER OF NODES IS  11

STEREO ATTRIBUTES: NONE
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DEFAULT MLEVEL IS ATOM
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GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS  30

STEREO ATTRIBUTES: NONE
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L20           20 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L19


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L20  ANSWER 1 OF 20  HCAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2006:630157  HCAPLUS  Full-text
DOCUMENT NUMBER:          145:83233
TITLE:                    Preparation of (3-alkoxypropyl)pyridinyl ketones with
                          herbicidal activities
INVENTOR(S):              Wendeborn, Sebastian Volker; Beaudegnies, Renaud;
                          Edmunds, Andrew; Luethy, Christoph; Schaetzer, Juergen
PATENT ASSIGNEE(S):       Syngenta Participations AG, Switz.
SOURCE:                   PCT Int. Appl., 34 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006066871	A1	20060629	WO 2005-EP13707	20051220
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
CA 2587882	A1	20060629	CA 2005-2587882	20051220
EP 1828132	A1	20070905	EP 2005-822105	20051220
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
MX 200707256	A	20070711	MX 2007-7256	20070615
PRIORITY APPLN. INFO.:			GB 2004-28137 A	20041222
			WO 2005-EP13707 W	20051220
OTHER SOURCE(S):	CASREACT 145:83233; MARPAT 145:83233			

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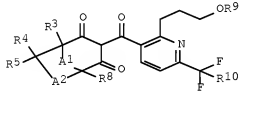

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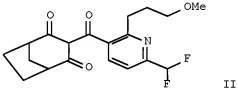
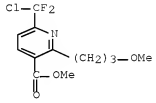


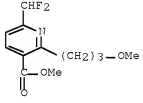
II

AB Title compds. I [wherein A1 = C(R1R2)p; A2 = C(R6R7)q; p, q = 1-2; R1 - R8 (independently) = H, Me or Et; R9 = alkyl; R10 = H, halo or (halo)alkyl] and agronomically acceptable salts, isomers, enantiomers, tautomers or N-oxides thereof were prepared as herbicides. Some intermediates for the preparation of I are claimed. For instance, successive Pd/C-mediated dechlorination of 6-(chlorodifluoromethyl)-2-(3-methoxypropyl)nicotinic acid Me ester with H2, ester hydrolysis with LiOH, chlorination of the resultant acid with oxalyl chloride, O-acylation of bicyclo[3.2.1]octane- 2,4-dione with the generated acyl chloride, and isomerization gave C-acylated compound II. Both pre-emergence and post-emergence herbicidal activities of representative I were evaluated. Those compds. generally exhibited stronger activities than structurally similar compds. reported previously. It has been found that the alkylene linkage in the 2th position of the pyridine ring plays a significant role on the activities, with propylene being the strongest one.

IT 894355-76-1 894355-77-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of alkoxypropylpyridinyl ketones with herbicidal activities)
RN 894355-76-1 HCAPLUS
CN 3-Pyridinecarboxylic acid, 6-(chlorodifluoromethyl)-2-(3-methoxypropyl)-, methyl ester (CA INDEX NAME)



RN 894355-77-2 HCAPLUS
CN 3-Pyridinecarboxylic acid, 6-(difluoromethyl)-2-(3-methoxypropyl)-, methyl ester (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:673266 HCAPLUS Full-text
DOCUMENT NUMBER: 143:172764
TITLE: Pyridylmethyl derivatives of 2,6-dichloroisonicotinic acid as disease controlling agents for agriculture and horticulture, process for their preparation
INVENTOR(S): Watanabe, Tsumoru; Araki, Nobuyuki; Kusano, Nobuyuki; Kokaji, Yuichi; Niizeki, Yoshitaka
PATENT ASSIGNEE(S): Kureha Chemical Industry Co., Ltd., Japan
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005068430	A1	20050728	WO 2005-JP211	20050112
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				

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NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: JP 2004-5283 A 20040113
OTHER SOURCE(S): MARPAT 143:172764
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [A = O, etc.; Q = II, etc.; X = alkyl, etc.; m = 0-4] were prepared Process for the preparation of compds. I [A, Q, X, m = same as above] was provided. For example, treatment of 2,6-dichloroisonicotinic acid (4.55 g) with 6-chloro-3-pyridinemethanol (3.09 mL), 4- dimethylaminopyridine (0.26 g) and 1-ethyl-3-(3- dimethylaminopropyl)carbodiimide hydrochloride (4.95 g) in THF (93 mL) at room temperature for 24 h followed by silica-gel purification afforded compound III (6.51 g). In control test against pyricularia oryzae, compound III exhibited the activity of 100%. Compds. I are claimed useful as disease controlling agents for agriculture and horticulture. Formulations are given.

IT 860774-80-7P 860775-01-5P 860775-04-8P
860775-06-0P
RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(pyridylmethyl derivs. of 2,6-dichloroisonicotinic acid as disease controlling agents for agriculture and horticulture, process for their preparation)

RN 860774-80-7 HCAPLUS
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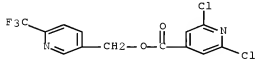
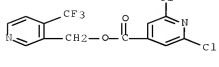


RN 860775-01-5 HCAPLUS
CN 4-Pyridinecarboxylic acid, 2,6-dichloro-, [4-(trifluoromethyl)-3-pyridinyl]methyl ester (CA INDEX NAME)



RN 860775-04-8 HCAPLUS
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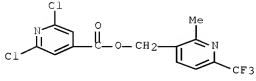

RN 860775-06-0 HCAPLUS
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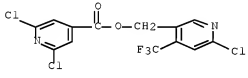

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:564643 HCAPLUS Full-text
DOCUMENT NUMBER: 143:97268
TITLE: Preparation of substituted pyridines as herbicides
INVENTOR(S): Luethy, Christoph; Edmunds, Andrew; Beaudegnies, Renaud; Wendeborn, Sebastian; Schaetzer, Juergen
PATENT ASSIGNEE(S): Syngenta Participations A.-G., Switz.
SOURCE: PCT Int. Appl., 70 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005058831	A1	20050630	WO 2004-EP14123	20041210
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,				

RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: CH 2003-2129 A 20031212

OTHER SOURCE(S): CASREACT 143:97268; MARPAT 143:97268

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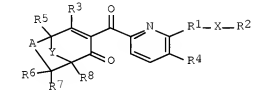

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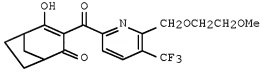


II

AB Title compds. I [R1 = alkylene, alkenylene, alkynylene, etc.; X1 = O, OCO, CO, etc.; R2 = alk(en/yn)yl, cycloalkyl, etc.; R3 = OM; M = metal cation, ammonium salt, etc.; R4 = halo, haloalkyl, CN, etc.; R5-8 = H, alkyl, alkylthio, alkylsulfinyl, etc.; A = bond, divalent alkyl; Y = alkylene, etc.] are prepared For instance, 4-hydroxy-3-[6-(2-methoxyethoxymethyl)-5-trifluoromethylpyridinyl-2-carbonyl]bicyclo[3.2.1]oct-3-en-2-one (II) is prepared from 6-(2-methoxyethoxymethyl)-5-trifluoromethylpyridine-2-carboxylic acid chloride and 1,3-bicyclo[3.2.1]octanedione. In a pre-emergence assay II at 250 g/ha exhibits good herbicidal action against, e.g., Panicum, Ipomea.

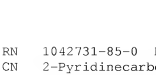
IT 1042731-84-9 1042731-85-0 1042731-86-1

RL: PRPH (Prophetic)

(Preparation of substituted pyridines as herbicides)

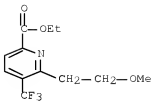
RN 1042731-84-9 HCAPLUS

CN 2-Pyridinecarboxylic acid, 6-(methoxymethyl)-5-(trifluoromethyl)-, ethyl ester (CA INDEX NAME)



RN 1042731-85-0 HCAPLUS

CN 2-Pyridinecarboxylic acid, 6-(2-methoxyethyl)-5-(trifluoromethyl)-, ethyl ester (CA INDEX NAME)



RN 1042731-86-1 HCAPLUS
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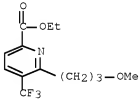

IT 856014-04-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of substituted pyridines as herbicides)
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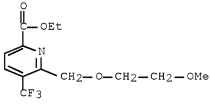

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:564642 HCAPLUS Full-text
DOCUMENT NUMBER: 143:97267
TITLE: Preparation of substituted pyridines as herbicides
INVENTOR(S): Luethy, Christoph; Edmunds, Andrew; Beaudegnies, Renaud; Wendeborn, Sebastian; Schaetzer, Juergen; Lutz, William
PATENT ASSIGNEE(S): Syngenta Participations A.-G., Switz.
SOURCE: PCT Int. Appl., 151 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005058830	A1	20050630	WO 2004-EP14113	20041210
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AU 2004299235	A1	20050630	AU 2004-299235	20041210
CA 2547600	A1	20050630	CA 2004-2547600	20041210
EP 1692108	A1	20060823	EP 2004-803754	20041210
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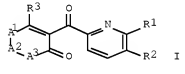
CN 1906165	A	20070131	CN 2004-80041064	20041210
BR 2004016983	A	20070221	BR 2004-16983	20041210
JP 2007513914	T	20070531	JP 2006-543496	20041210
MX 2006PA06428	A	20060823	MX 2006-PA6428	20060606
US 20070167631	A1	20070719	US 2006-596297	20060608
IN 2006CN02090	A	20070706	IN 2006-CN2090	20060612

PRIORITY APPLN. INFO.: CH 2003-2128 A 20031212
WO 2004-EP14113 W 20041210
OTHER SOURCE(S): CASREACT 143:97267; MARPAT 143:97267
GI



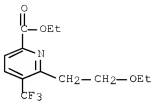
I

AB Title compds. I [R1 = bond, alkylene, alkenylene, etc.; R2 = halo, haloalkyl, CN, etc.; R3 = OH, OM; M = metal cation, ammonium cation, etc.; A1 = divalent alkyl, amino; A2 = divalent alkyl, CO, O, etc.; A3 = divalent alkyl, amino] are prepared For instance, 2-[6-(thiomorpholin-4-yl)- 5-trifluoromethylpyridine-2-carbonyl]cyclohexane-1,3-dione (II) is prepared from 6-(thiomorpholin-4-yl)-5-trifluoromethylpyridine-2-carboxylic acid, oxalyl chloride and cyclohexane-1,3-dione. In an herbicidal pre-emergence test, II shows good herbicidal action on, e.g., Panicum, Digitaria, Echinochloa, etc. at 250 g/ha.

IT 1044037-21-9
RL: PRPH (Prophetic)
(Preparation of substituted pyridines as herbicides)

RN 1044037-21-9 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED



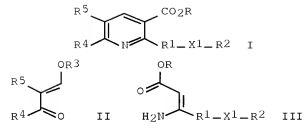
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:756694 HCAPLUS Full-text
DOCUMENT NUMBER: 141:277496
TITLE: Process for the preparation of substituted nicotinic acid esters
INVENTOR(S): Jackson, David Anthony; Bowden, Martin Charles
PATENT ASSIGNEE(S): Syngenta Participations A.-G., Switz.
SOURCE: PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004078729	A1	20040916	WO 2004-EP2291	20040305
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004218241	A1	20040916	AU 2004-218241	20040305
EP 1601653	A1	20051207	EP 2004-717574	20040305
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
CN 1753872	A	20060329	CN 2004-80004908	20040305
BR 2004008160	A	20060411	BR 2004-8160	20040305
JP 2006519803	T	20060831	JP 2006-504564	20040305
ZA 2005005696	A	20060329	ZA 2005-5696	20050715
US 20060199964	A1	20060907	US 2005-547840	20050906
IN 2005CN02175	A	20070831	IN 2005-CN2175	20050906

PRIORITY APPLN. INFO.: CH 2003-373 A 20030307
WO 2004-EP2291 W 20040305

OTHER SOURCE(S): MARPAT 141:277496
GI

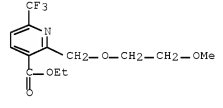


AB A process for the preparation of substituted nicotinic acid esters I [R = alkyl; R1 = (un)substituted alkylene, alkenylene; R2 = H, (un)substituted alkyl, alkenyl, alkynyl, etc.; R4 = haloalkyl; R5 = hydroxy, cycloalkyloxy, (alkoxy)alkoxy, etc.; X = O, OCO, CO2, etc.], which process comprises reacting a compound of formula II [R3 = (cyclo)alkyl, R4and R4 are defined as above] with a compound of formula III (R, R1, R2 and X are defined as above) in an inert solvent in the presence of a proton source, is disclosed. For example, reaction of Et 3-oxo-4-methoxyethoxybutanoate with 1-ethoxy-3-oxo-4,4,4-trifluorobutene gave 2-methoxyethoxymethyl-3- ethoxycarbonyl-6-trifluoromethylpyridine in 62% yield. Thus, the present invention provides a novel process producing the title compound at reasonable cost, in good yield and with good quality.

IT 757218-51-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of nicotinic acid esters)

RN 757218-51-2 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)-, ethyl ester (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	2003:454035 HCAPLUS Full-text
DOCUMENT NUMBER:	139:18606
TITLE:	Synergistic herbicidal compositions
INVENTOR(S):	Rueegg, Willy T.
PATENT ASSIGNEE(S):	Syngenta Participations Ag, Switz.
SOURCE:	PCT Int. Appl., 51 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

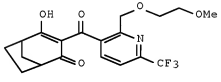
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003047344	A1	20030612	WO 2002-EP13618	20021202
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002361968	A1	20030617	AU 2002-361968	20021202

PRIORITY APPLN. INFO.: CH 2001-2208 A 20011203
WO 2002-EP13618 W 20021202

OTHER SOURCE(S): MARPAT 139:18606

GI



I

AB Synergistic herbicidal compns. comprise I and any of a large number of herbicides, such as prosulfocarb, picolinafen, pyraflufen-Et, beflubutamid, fenoxaprop-P-Et, diclofop-Me, amidosulfuron, flupyrsulfuron, flupyrsulfuron-methyl-sodium, metsulfuron-Me, sulfosulfuron, tribenuron-Me, imazamethabenz-Me, flucarbazone, chlorotoluron, isoproturon, methabenzthiazuron, bifenox, fluoroglycofen-Et, imazosulfuron, diflufenican, bilalafos, ethalfluralin, trifluralin, fluthiamid, isoxaben, triallate, 2,4-DB, dichlorprop, MCPA, MCPB, mecoprop, MCPP, mecoprop-P, clopyralid, fluroxypyr, quinmerac, benazolin-Et, difenzoquat, cyhalofop-Bu, dithiopyr, quinclorac, prodiamine, benefin and trifluralin. The compns. may also comprise a safener.

IT 537015-81-9
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(synergistic herbicidal composition)

RN 537015-81-9 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[[[(4,6-dimethoxy-2-pyrimidinyl)amino]carbonyl]amino]sulfonyl]-6-(trifluoromethyl)-, methyl ester, monosodium salt, mixt. with 4-hydroxy-3-[[2-[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)-3-pyridinyl]carbonyl]bicyclo[3.2.1]oct-3-en-2-one (9CI) (CA INDEX NAME)

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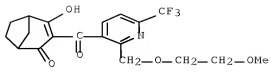
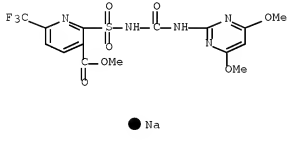
CRN 352010-68-5
CMF C19 H20 F3 N O5



CM 2

CRN 144740-54-5
CMF C15 H14 F3 N5 O7 S . Na



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

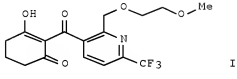
L20 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:454034 HCAPLUS Full-text
DOCUMENT NUMBER: 139:18605
TITLE: Synergistic herbicidal compositions
INVENTOR(S): Rueegg, Willy T.
PATENT ASSIGNEE(S): Syngenta Participations Ag, Switz.
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003047343	A1	20030612	WO 2002-EP13616	20021202
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002365631	A1	20030617	AU 2002-365631	20021202

PRIORITY APPLN. INFO.: CH 2001-2213 A 20011203
WO 2002-EP13616 W 20021202

OTHER SOURCE(S): MARPAT 139:18605

GI



I

AB Synergistic herbicidal compns. comprise I and any of a large number of herbicides, such as prosulfocarb, picolinafen, pyraflufen-Et, beflubutamid, fenoxaprop-P- Et, diclofop-Me, amidosulfuron, flupyrsulfuron, flupyrsulfuron-methyl-sodium, metsulfuron-Me, sulfosulfuron, tribenuron-Me, imazamethabenz-Me, flucarbazone, chlorotoluron, isoproturon, methabenzthiazuron, bifenox, fluoroglycofen-Et, imazosulfuron, diflufenican, bialafos, ethalfluralin, trifluralin, fluthiamide, isoxaben, triallate, 2,4-DB, dichlorprop, MCPA, MCPB, mecoprop, MCPP, mecoprop-P, clopyralid, fluroxypyr, quinmerac, benazolin-Et difenzoquat, cyhalofop-Bu, dithiopyr, quinclorac, prodiamine, benefin and trifluralin. The compns. optionally comprise a safener.

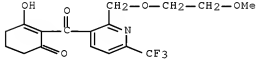
IT 537005-37-1 537005-60-0
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(synergistic herbicidal composition)

RN 537005-37-1 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-(difluoromethyl)-5-(4,5-dihydro-2-thiazolyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-, methyl ester, mixt. with 3-hydroxy-2-[[2-[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)-3-pyridinyl]carbonyl]-2-cyclohexen-1-one (9CI) (CA INDEX NAME)

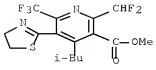
CM 1

CRN 380354-72-3
CMF C17 H18 F3 N O5



CM 2

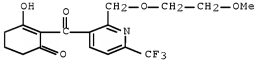
CRN 117718-60-2
CMF C16 H17 F5 N2 O2 S



RN 537005-60-0 HCAPLUS
CN 3-Pyridinecarboxylic acid, 2-[[[[(4,6-dimethoxy-2-pyrimidinyl)amino]carbonyl]amino]sulfonyl]-6-(trifluoromethyl)-, methyl ester, monosodium salt, mixt. with 3-hydroxy-2-[[2-[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)-3-pyridinyl]carbonyl]-2-cyclohexen-1-one (9CI) (CA INDEX NAME)

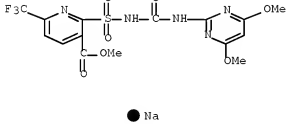
CM 1

CRN 380354-72-3
CMF C17 H18 F3 N O5



CM 2

CRN 144740-54-5
CMF C15 H14 F3 N5 O7 S . Na



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

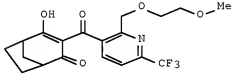
L20 ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:454033 HCAPLUS Full-text
DOCUMENT NUMBER: 139:18604
TITLE: Synergistic herbicidal compositions
INVENTOR(S): Rueegg, Willy T.
PATENT ASSIGNEE(S): Syngenta Participations Ag, Switz.
SOURCE: PCT Int. Appl., 184 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003047342	A1	20030612	WO 2002-EP13615	20021202
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2466554	A1	20030612	CA 2002-2466554	20021202
AU 2002361967	A1	20030617	AU 2002-361967	20021202
AU 2002361967	B2	20060608		
EP 1450607	A1	20040901	EP 2002-796559	20021202
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
MX 2004PA05264	A	20041011	MX 2004-PA5264	20040601
US 20050054533	A1	20050310	US 2004-497614	20040602

PRIORITY APPLN. INFO.: CH 2001-2214 A 20011203
WO 2002-EP13615 W 20021202

OTHER SOURCE(S): MARPAT 139:18604
GI



I

AB A synergistic herbicidal composition comprises I and any of a large number of herbicides, such as prosulfocarb, picolinafen, pyraflufen-Et, beflubutamid, fenoxaprop-P-Et, diclofop-Me, amidosulfuron, flupyrsulfuron, flupyrsulfuron-methyl-sodium, metsulfuron-Me, sulfosulfuron, tribenuron-Me, imazamethabenz-Me, flucarbazone, chlorotoluron, isoproturon, methabenzthiazuron, bifenox, fluoroglycofen-Et, imazosulfuron, diflufenican, bilanafos, ethalfluralin, trifluralin, fluthiamide, isoxaben, triallate, 2,4-DB, dichlorprop, MCPA, MCPB, mecoprop, MCPP, mecoprop-P, clopyralid, fluroxypyr, quinmerac, benazolin-Et, difenzoquat, cyhalofop-Bu, dithiopyr, quinclorac, prodiamine, benefin and trifluralin. The compns. optionally comprise a safener.

IT 537015-81-9
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(synergistic herbicidal composition)

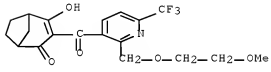
RN 537015-81-9 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[[[(4,6-dimethoxy-2-pyrimidinyl)amino]carbonyl]amino]sulfonyl]-6-(trifluoromethyl)-, methyl

ester, monosodium salt, mixt. with 4-hydroxy-3-[[2-[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)-3-pyridinyl]carbonyl]bicyclo[3.2.1]oct-3-en-2-one (9CI) (CA INDEX NAME)

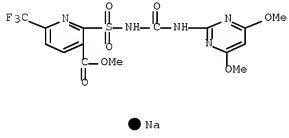
CM 1

CRN 352010-68-5
CMF C19 H20 F3 N O5



CM 2

CRN 144740-54-5
CMF C15 H14 F3 N5 O7 S . Na



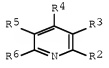
L20 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:529133 HCAPLUS Full-text
DOCUMENT NUMBER: 131:157711
TITLE: Preparation of pyridinecarboxylates and analogs as cholesteryl ester transfer protein inhibitors
INVENTOR(S): Lee, Len F.; Glenn, Kevin C.; Connolly, Daniel T.; Corley, David G.; Flynn, Daniel L.; Hamme, Ashton; Hegde, Shridhar G.; Melton, Michele A.; Schilling, Roger J.; Sikorski, James A.; Wall, Nancy N.; Zablocki, Jeffrey A.
PATENT ASSIGNEE(S): G.D. Searle and Co., USA
SOURCE: PCT Int. Appl., 327 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9941237	A1	19990819	WO 1999-US1871	19990211
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9932854	A	19990830	AU 1999-32854	19990211
US 6605624	B1	20030812	US 2000-600870	20001211
US 20040038939	A1	20040226	US 2003-403903	20030331
US 6794396	B2	20040921		
US 20040220231	A1	20041104	US 2004-852975	20040525
PRIORITY APPLN. INFO.:			US 1998-74586P	P 19980213
			WO 1999-US1871	W 19990211
			US 2000-600870	A3 20001211
			US 2003-403903	A3 20030331

OTHER SOURCE(S): MARPAT 131:157711

GI



I

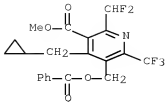
AB Title compds. [I; R2,R6 = H, OH, (fluoro)alkyl, alkoxy, etc.; R3 = OH, CHO, alkoxycarbonyl, (hetero)arylcarbonyl, etc.; R5 = H, halo, alkyl, alkoxy, etc.; R5 = H, halo, alkyl, alkoxy(carbonyl), etc.] were prepared Thus, CF3C(NH2):C(CO2Me)COMe was refluxed with Ac2O/HC(OMe)3 and the product converted in 2 steps to I (R2 = CF3, R3 = CO2Me, R4 = OCHMe2, R5 = R6 = H). Data for biol. activity of I were given.

IT 237757-75-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyridinecarboxylates and analogs as cholesteryl ester transfer protein inhibitors)

RN 237757-75-4 HCAPLUS

CN 3-Pyridinecarboxylic acid, 5-[(benzoyloxy)methyl]-4-(cyclopropylmethyl)-2-(difluoromethyl)-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)

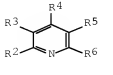


REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:124407 HCAPLUS Full-text
DOCUMENT NUMBER: 118:124407
ORIGINAL REFERENCE NO.: 118:21561a,21564a
TITLE: Preparation of haloalkylpyridinecarboxylates as herbicides
INVENTOR(S): Auinbauh, Susan Moritz; Lee, Len Fang; Van Sant, Karey Alan
PATENT ASSIGNEE(S): Monsanto Co., USA
SOURCE: PCT Int. Appl., 157 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9220659	A1	19921126	WO 1992-US4140	19920515
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
US 5169432	A	19921208	US 1991-704548	19910523
CA 2102118	A1	19921124	CA 1992-2102118	19920515
AU 9221568	A	19921230	AU 1992-21568	19920515
EP 586556	A1	19940316	EP 1992-912934	19920515
EP 586556	B1	19970416		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
AT 151753	T	19970515	AT 1992-912934	19920515
ES 2102508	T3	19970801	ES 1992-912934	19920515
PRIORITY APPLN. INFO.:			US 1991-704548 A	19910523
			WO 1992-US4140 A	19920515

OTHER SOURCE(S): MARPAT 118:124407
GI

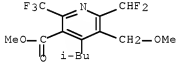


AB Title compds. I [R2, R6 = bromoalkyl, chloroalkyl, fluoroalkyl, chlorofluoroalkyl, alkoxy, at least 1 of R2, R6 = fluoroalkyl; R4 = alkyl, cycloalkylalkyl, alkylthioalkyl, cycloalkyl, alkoxyalkyl, dialkylaminoalkyl; 1 of R3 and R5 = COY and the other = (CR9R10)nX, CX:CH2, CR9:CZX; X = halo, OH, N3, cyano, 4-morpholinyl, 1-pyrrolidinyl, etc.; Y = alkylthio, alkoxy, 1H-pyrazolyl; Z = H, alkyl, cyano; R9, R10 = H, alkyl, alkenyl, alkynyl; n = 1-3; X = OH when n = 1 and R9 and R10 = H] were prepared as herbicides. Thus, I [R2 = CF3, R3 = CO2Me, R4 = CH2CHMe2, R5 = CH2OH, R6 = CF2H] (II) was refluxed with SOCl2 and pyridine to give title compound I (R5 = CH2Cl, all others as defined for II) (III). III at 11.21 kg/ha preemergent gave 75-100% control of common lambsquarters.

IT 146199-05-5P 146199-09-9P 146199-23-9P
146199-34-0P 146199-35-1P 146199-37-3P
146199-43-1P 146199-44-2P 146199-45-3P
146199-48-6P 146199-49-7P 146199-73-7P
146199-74-8P 146199-75-9P 146199-76-0P
146199-88-4P 146199-89-5P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as herbicide)

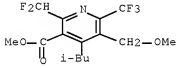
RN 146199-05-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, 6-(difluoromethyl)-5-(methoxymethyl)-4-(2-methylpropyl)-2-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



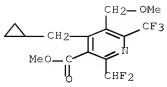
RN 146199-09-9 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-(difluoromethyl)-5-(methoxymethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)

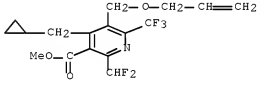


RN 146199-33-9 HCAPLUS

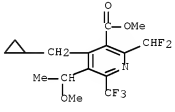
CN 3-Pyridinecarboxylic acid, 4-(cyclopropylmethyl)-2-(difluoromethyl)-5-(methoxymethyl)-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



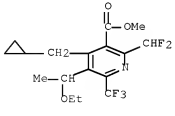
RN 146199-34-0 HCAPLUS
CN 3-Pyridinecarboxylic acid, 4-(cyclopropylmethyl)-2-(difluoromethyl)-5-[(2-propen-1-yloxy)methyl]-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



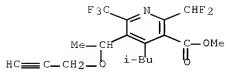
RN 146199-35-1 HCAPLUS
CN 3-Pyridinecarboxylic acid, 4-(cyclopropylmethyl)-2-(difluoromethyl)-5-(1-methoxyethyl)-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



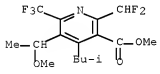
RN 146199-37-3 HCAPLUS
CN 3-Pyridinecarboxylic acid, 4-(cyclopropylmethyl)-2-(difluoromethyl)-5-(1-ethoxyethyl)-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



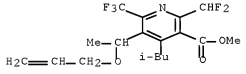
RN 146199-43-1 HCAPLUS
CN 3-Pyridinecarboxylic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-5-[1-(2-propyn-1-yloxy)ethyl]-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



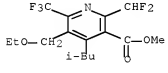
RN 146199-44-2 HCAPLUS
CN 3-Pyridinecarboxylic acid, 2-(difluoromethyl)-5-(1-methoxyethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



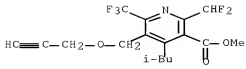
RN 146199-45-3 HCAPLUS
CN 3-Pyridinecarboxylic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-5-[1-(2-propen-1-yloxy)ethyl]-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



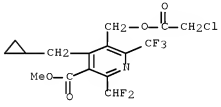
RN 146199-48-6 HCAPLUS
CN 3-Pyridinecarboxylic acid, 2-(difluoromethyl)-5-(ethoxymethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



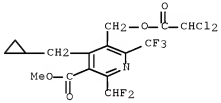
RN 146199-49-7 HCAPLUS
CN 3-Pyridinecarboxylic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-5-[(2-propyn-1-yloxy)methyl]-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



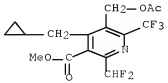
RN 146199-73-7 HCAPLUS
CN 3-Pyridinecarboxylic acid, 5-[[(2-chloroacetyl)oxy]methyl]-4-(cyclopropylmethyl)-2-(difluoromethyl)-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



RN 146199-74-8 HCAPLUS
CN 3-Pyridinecarboxylic acid, 4-(cyclopropylmethyl)-5-[[(2,2-dichloroacetyl)oxy]methyl]-2-(difluoromethyl)-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)

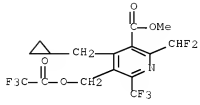


RN 146199-75-9 HCAPLUS
CN 3-Pyridinecarboxylic acid, 5-[(acetyloxy)methyl]-4-(cyclopropylmethyl)-2-(difluoromethyl)-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)

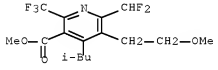


RN 146199-76-0 HCAPLUS
CN 3-Pyridinecarboxylic acid, 4-(cyclopropylmethyl)-2-(difluoromethyl)-5-

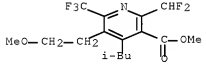
[[(2,2,2-trifluoroacetyl)oxy]methyl]-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



RN 146199-88-4 HCAPLUS
CN 3-Pyridinecarboxylic acid, 6-(difluoromethyl)-5-(2-methoxyethyl)-4-(2-methylpropyl)-2-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



RN 146199-89-5 HCAPLUS
CN 3-Pyridinecarboxylic acid, 2-(difluoromethyl)-5-(2-methoxyethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



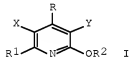
L20 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1992:571234 HCAPLUS Full-text
DOCUMENT NUMBER: 117:171234
ORIGINAL REFERENCE NO.: 117:29601a,29604a
TITLE: Preparation of substituted pyridinecarboxylic acid derivatives with herbicidal activity
INVENTOR(S): Korte, Donald E.; Lee, Len F.
PATENT ASSIGNEE(S): Monsanto Co., USA
SOURCE: U.S., 53 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 5125956	A	19920630	US 1991-660480	19910225
WO 9214711	A1	19920903	WO 1992-US1342	19920220
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
AU 9214613	A	19920915	AU 1992-14613	19920220
AU 650116	B2	19940609		
EP 573575	A1	19931215	EP 1992-907815	19920220
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
JP 06505022	T	19940609	JP 1992-507337	19920220
US 5228897	A	19930720	US 1992-871525	19920420
US 5391540	A	19950221	US 1993-45154	19930412
US 5512536	A	19960430	US 1994-339994	19941115
US 5643854	A	19970701	US 1995-467510	19950606
US 5824625	A	19981020	US 1995-471918	19950606
US 5843867	A	19981201	US 1995-467681	19950606
US 5877119	A	19990302	US 1995-471784	19950606
PRIORITY APPLN. INFO.:			US 1991-660480 A	19910225
			WO 1992-US1342 A	19920220
			US 1992-871525 A3	19920420
			US 1993-45154 A3	19930412
			US 1994-339994 A3	19941115

OTHER SOURCE(S): MARPAT 117:171234

GI



I

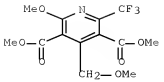
AB Pyridinecarboxylic acid derivs. I (R = C1-C6 straight or branched alkyl, C1-C7 haloalkyl, C2-C8 carboxyalkyl, etc., R1 = fluorinated Me, chlorofluorinated Me, fluorinated Et, R2 = H, C1-C7 alkyl, C13C, C2-C8 cyanoalkyl, C3-C7 alkenyl, C3-C7 alkynyl, X, Y = C(Z):Z1, Z = H, halogen, OH, C1-C7 alkoxy, C1-C7 haloalkoxy, NR4R5, 1,3-dithiolan-2-yl, 1,3-dioxolan-2-yl, 3,3-dioxo-1,3-oxathiolan-2-yl, Z1 = O, NR3, R3 = lower alkyl, R4, R5 = H, lower alkyl, NHAc, C1-C7 hydroxyalkyl) were prepared and tested for pre- and post-emergent herbicidal activity on plants. Thus, 0.77 mol I (R = CH2CHMe2, R1 = CF3, R2 = H, X = CO2Me, Y = CO2H) reacted with MeOH/H2SO4 under reflux to give I (Y = CO2Me) in 50% yield. I (R = CH2CHMe2, R1 = CF3, R2 = Me, X = Y = CO2H) showed 75-100% inhibition against yellow nutsedge.

IT 143420-00-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and herbicidal activity of)

RN 143420-00-2 HCAPLUS

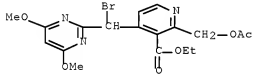
CN 3,5-Pyridinedicarboxylic acid, 2-methoxy-4-(methoxymethyl)-6-(trifluoromethyl)-, 3,5-dimethyl ester (CA INDEX NAME)



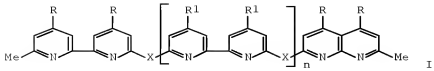
L20 ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1992:128972 HCAPLUS Full-text
DOCUMENT NUMBER: 116:128972
ORIGINAL REFERENCE NO.: 116:21843a,21846a
TITLE: Preparation of azinylphthalides and related compounds as herbicides
INVENTOR(S): Anderson, Richard James; Cloudsdale, Ian Stuart; Hokama, Takeo
PATENT ASSIGNEE(S): Sandoz A.-G., Switz.; Sandoz-Patent-G.m.b.H.; Sandoz-Erfindungen Verwaltungsgesellschaft m.b.H.
SOURCE: Eur. Pat. Appl., 65 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 461079	A2	19911211	EP 1991-810428	19910605
EP 461079	A3	19920304		
EP 461079	B1	19970716		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
HU 61153	A2	19921228	HU 1991-1771	19910527
HU 212435	B	19960628		
AU 9178204	A	19911212	AU 1991-78204	19910605
AU 649448	B2	19940526		
RU 2040522	C1	19950725	RU 1991-4895617	19910605
IL 98378	A	19951127	IL 1991-98378	19910605
AT 155466	T	19970815	AT 1991-810428	19910605
ES 2107447	T3	19971201	ES 1991-810428	19910605
CA 2043976	A1	19911208	CA 1991-2043976	19910606
CA 2043976	C	20060404		
CN 1057837	A	19920115	CN 1991-104849	19910606
CN 1033735	C	19970108		
JP 04235967	A	19920825	JP 1991-163978	19910606
PL 170729	B1	19970131	PL 1991-290573	19910606
SK 278746	B6	19980204	SK 1991-1737	19910606
BR 9102386	A	19920114	BR 1991-2386	19910607
ZA 9104382	A	19930224	ZA 1991-4382	19910607
US 5506192	A	19960409	US 1994-201150	19940223
US 5561101	A	19961001	US 1995-457544	19950601
US 5627137	A	19970506	US 1995-457907	19950601
US 5627138	A	19970506	US 1995-457909	19950601
PRIORITY APPLN. INFO.:			US 1990-534794 A	19900607
			US 1990-633592 A	19901221
			US 1991-804150 B2	19911206
			US 1993-36006 B1	19930323
			US 1994-201150 A1	19940223

OTHER SOURCE(S): MARPAT 116:128972
GI For diagram(s), see printed CA Issue.
AB Title compds. I [ring A = Ph, naphthyl, (benzo)pyridyl (oxide), pyrazinyl oxide, pyrimidinyl, pyrazinyl, cinnolinyl, quinoxalinyl, (benzo-fused) 5-membered heteroaryl; R = cyano, CHO, CX1X2X3, ketone-forming group, (modified) (thio)carboxyl, carbamoyl, hydroxyalkyl, CH2O2C bridged to an adjacent A-ring carbon, etc.; Y1-Y3 = H, halo, OH, (substituted) alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, alkynyloxy, alkylsulfonyloxy, etc.; Y1Y2 = 3-5-membered bridge; Y1R = C(S)O, other bridging group; X, Y = H, OH, halo, cyano, (substituted) alkyl, alkoxy, alkoxycarbonyl, hydroxyalkyl, haloalkyl, acyl, acyloxy, carbamoyl, carbamoyloxy, alkylthio, aryloxy, aryl, etc.; XR = CO2, C(O)S, CONH, etc.; X1, X2, X3 = H, OH, alkoxy, alkylthio, hydroxyalkyl, hydroxybenzyl; X1X2 = 4-5 membered bridge; R1, R3 = H, halo, (substituted) alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, alkylthio, cycloalkyl, heterocyclylalkoxy, aryloxy, etc.; W1-W4 = CH, N, NR3] were prepared as herbicides (no data). Thus, 7-chlorophthalide in THF at -70° was treated with LiN(CHMe2)2 and then 2-methylsulfonyl-4,6-dimethoxypyrimidine followed by 4 h stirring to give title compound II.
IT 139511-44-7P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as herbicide)
RN 139511-44-7 HCAPLUS
CN 3-Pyridinecarboxylic acid, 2-[(acetyloxy)methyl]-4-[bromo(4,6-dimethoxy-2-pyrimidinyl)methyl]-, ethyl ester (CA INDEX NAME)



L20 ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1991:449339 HCAPLUS Full-text
DOCUMENT NUMBER: 115:49339
ORIGINAL REFERENCE NO.: 115:8557a,8560a
TITLE: Synthesis of unsubstituted and 4,4'-substituted oligobipyridines as ligand strands for helicate self-assembly
AUTHOR(S): Harding, Margaret M.; Koert, Ulrich; Lehn, Jean Marie; Marquis-Rigault, Annie; Piguet, Claude; Siegel, Jay
CORPORATE SOURCE: Inst. Le Bel, Univ. Louis Pasteur, Strasbourg, F-67000, Fr.
SOURCE: Helvetica Chimica Acta (1991), 74(3), 594-610
CODEN: HCACAV; ISSN: 0018-019X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 115:49339
GI



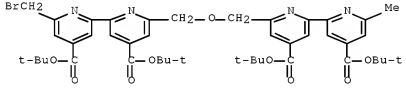
I

AB Oligobipyridines I (R, R1 = H, CO2CMe3, CONEt2, X = CH2OCH2, n = 0, 2; R, R1 = H, CO2CMe3, CONEt2, CH2CH2CO2CMe3, X = CH2OCH2, n = 1, 3) were prepared by Williamson alkoxylation of bromomethyl or bis(bromomethyl)bipyridine derivative with a hydroxymethylbipyridine derivative Thus, 6-(hydroxymethyl)-6'- methyl-2,2'-bipyridine upon treatment with 6,6'-bis(bromomethyl)-2,2'-bipyridine afforded 80% oligopyridine I (R = R1 = H, n = 1).

IT 134842-41-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and Williamson alkoxylation of, with (hydroxymethyl)bipyridine derivative)

RN 134842-41-4 HCAPLUS

CN [2,2'-Bipyridine]-4,4'-dicarboxylic acid, 6-[[[6'-(bromomethyl)-4,4'-bis[(1,1-dimethylethoxy)carbonyl][2,2'-bipyridin]-6-yl]methoxy]methyl]-6'-methyl-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



L20 ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:478097 HCAPLUS Full-text

DOCUMENT NUMBER: 113:78097

ORIGINAL REFERENCE NO.: 113:13210h,13211a

TITLE: Derivation of fluorine-containing pyridinedicarboxylates. III. Regioselective anion chemistry at the 2- and 4-position

AUTHOR(S): Chupp, John P.; Molyneaux, John M.

CORPORATE SOURCE: Tech. Div., Monsanto Agric. Co., St. Louis, MO, 63167, USA

SOURCE: Journal of Heterocyclic Chemistry (1989), 26(6), 1771-80
CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 113:78097

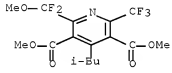
AB 4-Alkyl-2-(difluoromethyl)-6-(trifluoromethyl)-3,5-pyridinedicarboxylates were deprotonated by various bases at either the benzylic carbanion of the 4-position, or at the 2-F2CH group to effect regioselective reaction of electrophiles. Weaker bases up to and including KOCMe3 or NaN(SiMe3)2 effected reaction at the 4-position in a Stobbe-type condensation with

aldehydes and ketones. In similar manner CS2, CO2, alkyl halides, silyl halides, and C2Cl6 produced highly functionalized derivs. In contrast, use of LiN(CHMe2)2 and like bases selectively effected carbanion formation at the 2-position followed by reaction with the cited electrophiles.

IT 128608-35-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 128608-35-5 HCAPLUS

CN 3,5-Pyridinedicarboxylic acid, 2-(difluoromethoxymethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-, dimethyl ester (9CI) (CA INDEX NAME)



L20 ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:198085 HCAPLUS Full-text

DOCUMENT NUMBER: 112:198085

ORIGINAL REFERENCE NO.: 112:33481a,33484a

TITLE: A novel dehydrofluorination of 2-(trifluoromethyl)dihydro-3,5-pyridinedicarboxylates to 2-(difluoromethyl)-3,5-pyridinedicarboxylates

AUTHOR(S): Lee, Len F.; Stikes, Gina L.; Molyneaux, John M.; Sing, Y. Larry; Chupp, John P.; Woodard, Scott S.

CORPORATE SOURCE: Technol. Div., Monsanto Agric. Co., St. Louis, MO, 63167, USA

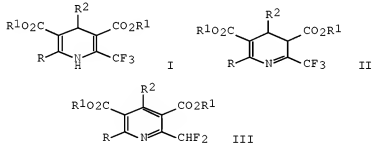
SOURCE: Journal of Organic Chemistry (1990), 55(9), 2872-7
CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 112:198085

GI



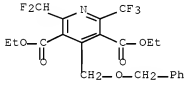
AB 2-(Trifluoromethyl)-1,4- and -3,4-dihydro-3,5-pyridinedicarboxylates I and II (R = CF3, Me, Et; R1 = Me, Et; R2 = Me, Et, Pr, Bu, Ph, CF3, pyridyl, CH2SMe, etc.) undergo an unprecedented dehydrofluorination upon treatment with DBU,

NBu3, NEt3, EtN(CHMe2)2, or 2,6-lutidine to give the corresponding 2-(difluoromethyl)-3,5-pyridinedicarboxylates III.

IT 97887-82-6P 97887-87-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

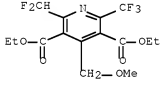
RN 97887-82-6 HCAPLUS

CN 3,5-Pyridinedicarboxylic acid, 2-(difluoromethyl)-4-[(phenylmethoxy)methyl]-6-(trifluoromethyl)-, diethyl ester (9CI) (CA INDEX NAME)



RN 97887-87-1 HCAPLUS

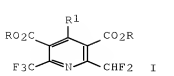
CN 3,5-Pyridinedicarboxylic acid, 2-(difluoromethyl)-4-(methoxymethyl)-6-(trifluoromethyl)-, diethyl ester (9CI) (CA INDEX NAME)



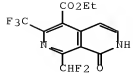
L20 ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	1990:76991 HCAPLUS Full-text
DOCUMENT NUMBER:	112:76991
ORIGINAL REFERENCE NO.:	112:13159a,13162a
TITLE:	Derivation of fluorine-containing pyridinedicarboxylates. II. Elaboration at the 4-position
AUTHOR(S):	Chupp, John P.; Molyneaux, John M.
CORPORATE SOURCE:	Tech. Div., Monsanto Agric. Co., St. Louis, MO, 63167, USA
SOURCE:	Journal of Heterocyclic Chemistry (1989), 26(3), 645-53 CODEN: JHTCAD; ISSN: 0022-152X
DOCUMENT TYPE:	Journal
LANGUAGE:	English
OTHER SOURCE(S):	CASREACT 112:76991

GI



I



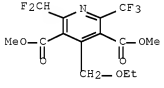
II

AB In response to the bioactivity found in F-containing 4-alkyl-3,5-pyridinedicarboxylates, a series of novel 4-substituted derivs., not directly available by Hantzsch sequences, were prepared Starting 4-alkylpyridines I (R = Me, Et; R1 = Et, Pr) were converted via enamines to a variety of products, as was aldehyde I (R = Me, R1 = CH2CHO). Acid derivs. were prepared from I (R = Me, R1 = CH2CO2H). Addition of O, S, and carbenoids effected conversion of 4-allylpyridine I (R = Me, R1 = allyl) to epoxy and cyclopropyl derivs. A number of neighboring-group effects were noted, including those forming the fused-ring systems. The crystal structure of naphthyridine II was also determined

IT 124945-89-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 124945-89-7 HCAPLUS

CN 3,5-Pyridinedicarboxylic acid, 2-(difluoromethyl)-4-(ethoxymethyl)-6-(trifluoromethyl)-, dimethyl ester (9CI) (CA INDEX NAME)



L20 ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	1989:71000 HCAPLUS Full-text
DOCUMENT NUMBER:	110:71000
ORIGINAL REFERENCE NO.:	110:11623a,11626a
TITLE:	Herbicidal pyridine compounds
AUTHOR(S):	Anon.
CORPORATE SOURCE:	UK
SOURCE:	Research Disclosure (1988), 295, 867-73 (No. 29529) CODEN: RSDSBB; ISSN: 0374-4353
DOCUMENT TYPE:	Journal; Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

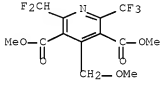
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RD 295029		19881110	RD 1988-295029	19881110
PRIORITY APPLN. INFO.:			RD 1988-295029	19881110

AB Ninety-six pyridine herbicides (10 lb/acre) were evaluated for their post-emergence herbicidal activity against 10 weeds, e.g., large crabgrass, morning glory and wild buckwheat, and the results were tabulated.

IT 97886-72-1
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
(herbicidal activity of, postemergence)

RN 97886-72-1 HCAPLUS

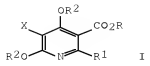
CN 3,5-Pyridinedicarboxylic acid, 2-(difluoromethyl)-4-(methoxymethyl)-6-(trifluoromethyl)-, dimethyl ester (9CI) (CA INDEX NAME)



L20 ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1986:497334 HCAPLUS Full-text
DOCUMENT NUMBER: 105:97334
ORIGINAL REFERENCE NO.: 105:15729a,15732a
TITLE: Substituted 4,6-alkoxypyridinecarboxylate compounds
INVENTOR(S): Lee, Len Fang
PATENT ASSIGNEE(S): Monsanto Co. , USA
SOURCE: Eur. Pat. Appl., 49 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
EP 181311	A2	19860514	EP 1985-870150		19851105
EP 181311	A3	19880713			
EP 181311	B1	19900829			
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE					
US 4609399	A	19860902	US 1984-668790		19841106
AU 8549336	A	19860529	AU 1985-49336		19851104
AU 574857	B2	19880714			
JP 61115070	A	19860602	JP 1985-247867		19851105
JP 06057697	B	19940803			
ZA 8508501	A	19860827	ZA 1985-8501		19851105
CA 1230122	A1	19871208	CA 1985-494605		19851105
AT 55990	T	19900915	AT 1985-870150		19851105
US 4741766	A	19880503	US 1986-869490		19860602
PRIORITY APPLN. INFO.:			US 1984-668790	A	19841106
			EP 1985-870150	A	19851105

OTHER SOURCE(S): CASREACT 105:97334; MARPAT 105:97334
GI



I

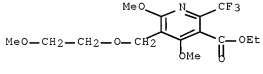
AB Pyridinecarboxylates I [R = H, alkyl, alkenyl, alkynyl, haloalkyl, haloalkenyl; R1 = fluorinated or chlorofluorinated Me; R2 = H, alkyl; X = H, CO2R3, CONR4R5, cyano, alkyl, haloalkyl, alkoxyalkoxyalkyl, cyanoalkyl, carbalkoxyalkyl; R3 = H, alkyl, alkenyl, alkynyl, haloalkyl; R4, R5 = H, alkyl] are prepared as herbicides or intermediates thereof. Thus, cyclocondensation of EtO2CC.tplbond.CO2Et with CF3CN in the presence of KOCMe3 gave 95% I (R = Et, R1 = CF3, R2 = X = H), which was methylated by K2CO3-MeI to give 64.5% I (R = Et, R1 = CF3, R2 = Me, X = H). This compound was lithiated by (Me2CH)2NLi at -78°, followed by carboxylation with Dry Ice, to give 95% I (R = Et, R1 = CF3, R2 = Me, X = CO2H), which was esterified by SOCl2-MeOH to give 42% I (R = Et, R1 = CF3, R2 = Me, X = CO2Me) (II). At 1.12 kg/ha (preemergent), II gave 75-100% control of several weeds, e.g. barnyard grass, with 0-24% inhibition of wheat and rice.

IT 103901-01-5P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as herbicide)

RN 103901-01-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, 4,6-dimethoxy-5-[(2-methoxyethoxy)methyl]-2-(trifluoromethyl)-, ethyl ester (CA INDEX NAME)



L20 ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:19514 HCAPLUS Full-text

DOCUMENT NUMBER: 104:19514

ORIGINAL REFERENCE NO.: 104:3281a,3284a

TITLE: Substituted 2,6-substituted pyridine compounds

INVENTOR(S): Lee, Len Fang

PATENT ASSIGNEE(S): Monsanto Co. , USA

SOURCE: Eur. Pat. Appl., 238 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

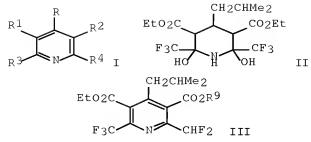
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 133612	A2	19850227	EP 1984-870119	19840810

EP 133612	A3	19870429			
EP 133612	B1	19910227			
R: AT, BE, CH, DE, FR, IT, LI, LU, NL, SE					
US 4692184	A	19870908	US 1984-602021		19840424
DK 8403858	A	19850212	DK 1984-3858		19840810
DK 162887	B	19911223			
DK 162887	C	19920706			
FI 8403169	A	19850212	FI 1984-3169		19840810
FI 87201	B	19920831			
FI 87201	C	19921210			
NO 8403205	A	19850212	NO 1984-3205		19840810
NO 168801	B	19911230			
NO 168801	C	19920408			
AU 8431777	A	19850214	AU 1984-31777		19840810
AU 564070	B2	19870730			
GB 2145713	A	19850403	GB 1984-20324		19840810
GB 2145713	B	19870903			
JP 60078965	A	19850504	JP 1984-166677		19840810
JP 04047667	B	19920804			
DD 222767	A5	19850529	DD 1984-266171		19840810
BR 8404011	A	19850716	BR 1984-4011		19840810
ZA 8406249	A	19850731	ZA 1984-6249		19840810
HU 37122	A2	19851128	HU 1984-3064		19840810
HU 196374	B	19881128			
RO 89518	B3	19860630	RO 1984-115468		19840810
IN 158230	A1	19860927	IN 1984-MA600		19840810
PL 142321	B1	19871031	PL 1984-249146		19840810
IL 72638	A	19871130	IL 1984-72638		19840810
RO 94161	B3	19880330	RO 1984-122488		19840810
CA 1272199	A1	19900731	CA 1984-460734		19840810
AT 61048	T	19910315	AT 1984-870119		19840810
US 4826530	A	19890502	US 1987-62012		19870615
US 4978384	A	19901218	US 1989-345812		19890501
US 5142055	A	19920825	US 1990-592711		19901004
NO 9100054	A	19850212	NO 1991-54		19910107
NO 172936	B	19930621			
NO 172936	C	19930929			
NO 9100055	A	19850212	NO 1991-55		19910107
NO 172937	B	19930621			
NO 172937	C	19930929			
NO 9100056	A	19850212	NO 1991-56		19910107
NO 172642	B	19930510			
NO 172642	C	19930818			
NO 9100057	A	19850212	NO 1991-57		19910107
NO 172641	B	19930510			
NO 172641	C	19930818			
PRIORITY APPLN. INFO.:			US 1983-522430	A	19830811
			US 1984-602021	A	19840424
			EP 1984-870119	A	19840810
			NO 1984-3205	A1	19840810
			US 1987-62012	A3	19870615
			US 1989-344929	B3	19890428

OTHER SOURCE(S): CASREACT 104:19514; MARPAT 104:19514

GI

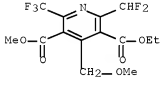


AB Herbicidal pyridinecarboxylates and derivs., I [R = (un)substituted alkyl, alkenyl, alkynyl, heterocyclic, cycloalkyl; R1, R2 = C(X)X1R5, COR6, CONR7R8, CH2OH, cyano; R3, R4 = Me, fluorinated Me, chlorofluorinated Me; one of R3 and R4 must contain F; R5 = H, (un)substituted alkyl; R6 = H, halo; R7, R8 = H, Ph, alkyl; X = O, imino; X1 = O, S] (>350 products and intermediates) were prepared Thus, dihydroxypiperidinedicarboxylate II was dehydrated, and the resulting dihydropyridinedicarboxylate was defluorinated and aromatized using DBU, to give pyridinedicarboxylate III (R9 = Et). III (R9 = Et) underwent partial saponification to III (R9 = H), which was treated sequentially with SOCl2 and MeOH to give III (R9 = Me) (IV). At 0.14 kg/ha pre-emergent, IV gave complete control of barnyard grass (Echinochloa crus-galli), whereas cotton was unaffected.

IT 97886-79-8P 97887-73-5P 97887-82-6P
97897-84-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and herbicidal activity of)

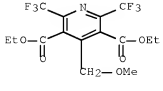
RN 97886-79-8 HCAPLUS

CN 3,5-Pyridinedicarboxylic acid, 2-(difluoromethyl)-4-(methoxymethyl)-6-(trifluoromethyl)-, 3-ethyl 5-methyl ester (CA INDEX NAME)

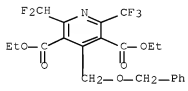


RN 97887-73-5 HCAPLUS

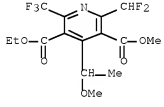
CN 3,5-Pyridinedicarboxylic acid, 4-(methoxymethyl)-2,6-bis(trifluoromethyl)-, diethyl ester (9CI) (CA INDEX NAME)



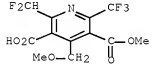
RN 97887-82-6 HCAPLUS
CN 3,5-Pyridinedicarboxylic acid, 2-(difluoromethyl)-4-[(phenylmethoxy)methyl]-6-(trifluoromethyl)-, diethyl ester (9CI) (CA INDEX NAME)



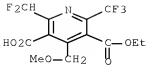
RN 97897-84-2 HCAPLUS
CN 3,5-Pyridinedicarboxylic acid, 2-(difluoromethyl)-4-(1-methoxyethyl)-6-(trifluoromethyl)-, 5-ethyl 3-methyl ester (CA INDEX NAME)



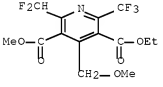
IT 97886-76-5P 97887-98-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, alkylation, and herbicidal activity of)
RN 97886-76-5 HCAPLUS
CN 3,5-Pyridinedicarboxylic acid, 2-(difluoromethyl)-4-(methoxymethyl)-6-(trifluoromethyl)-, 5-methyl ester (CA INDEX NAME)



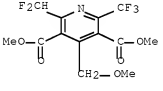
RN 97887-98-4 HCAPLUS
CN 3,5-Pyridinedicarboxylic acid, 2-(difluoromethyl)-4-(methoxymethyl)-6-(trifluoromethyl)-, 5-ethyl ester (CA INDEX NAME)



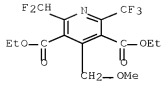
IT 97886-70-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, bromination and alkoxylation, and herbicidal activity of)
RN 97886-70-9 HCAPLUS
CN 3,5-Pyridinedicarboxylic acid, 2-(difluoromethyl)-4-(methoxymethyl)-6-(trifluoromethyl)-, 5-ethyl 3-methyl ester (CA INDEX NAME)



IT 97886-72-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, saponification, and herbicidal activity of)
RN 97886-72-1 HCAPLUS
CN 3,5-Pyridinedicarboxylic acid, 2-(difluoromethyl)-4-(methoxymethyl)-6-(trifluoromethyl)-, dimethyl ester (9CI) (CA INDEX NAME)



IT 97887-87-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, saponification, bromination and alkoxylation, and herbicidal activity
of)
RN 97887-87-1 HCAPLUS
CN 3,5-Pyridinedicarboxylic acid, 2-(difluoromethyl)-4-(methoxymethyl)-6-(trifluoromethyl)-, diethyl ester (9CI) (CA INDEX NAME)

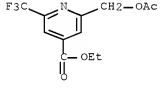


L20 ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1973:92575 HCAPLUS Full-text
DOCUMENT NUMBER: 78:92575
ORIGINAL REFERENCE NO.: 78:14767a,14770a
TITLE: Antimalarials. 4. 4-Pyridinemethanols with styryl and benzoyl substituents
AUTHOR(S): LaMontagne, M. P.
CORPORATE SOURCE: Ash Stevens Inc., Detroit, MI, USA
SOURCE: Journal of Medicinal Chemistry (1973), 16(1), 68-72
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The most potent antimalarial of 7 styryl-substituted 4-pyridinemethanols prepared was α-[(di-n-butylamino)methyl]-2-(4-chlorostyryl)-6-(trifluoromethyl)-4-pyridinemethanol-HCl (I) [38897-97-1], which was curative against Plasmodium berghei in mice at 20 mg/kg. I was synthesized from Et 6-(trifluoromethyl)-2-picoline-4-carboxylate [38897-98-2] by oxidation to the 2-pyridylcarbinol acetate with CF3CO3H and Ac2O, hydrolysis with NaOEt, oxidation to the aldehyde with SeO2, reaction with 4-chlorphenyltriphenylphosphonium methylide [38897-99-3] to introduce the styryl group, hydrolysis of the Et ester to the isonicotinic acid, and introduction of the side chain by the method of R. E. Lutz, et al. (1946).

IT 39965-93-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 39965-93-0 HCAPLUS
CN 4-Pyridinecarboxylic acid, 2-[(acetyloxy)methyl]-6-(trifluoromethyl)-, ethyl ester (CA INDEX NAME)



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L13 STR

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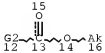
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE
L15 78538 SEA FILE=REGISTRY SSS FUL L13
L16 STR



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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 11

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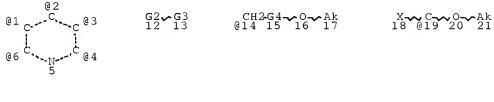
L18 STR



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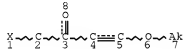
VAR G3=14/19/22/28/31
REP G4=(0-2) CH2
NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 30

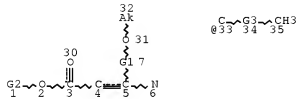
STEREO ATTRIBUTES: NONE
L19 49 SEA FILE=REGISTRY SUB=L17 SSS FUL L18
L20 20 SEA FILE=HCAPLUS ABB=ON PLU=ON L19
L23 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE
L25 488 SEA FILE=REGISTRY SSS FUL L23
L32 STR



REP G1=(1-3) C
VAR G2=ME/ET/I-PR/N-PR/I-BU/N-BU/T-BU/S-BU/33
REP G3=(3-4) C
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE
L34 2316 SEA FILE=REGISTRY SSS FUL L32
L35 462 SEA FILE=HCAPLUS ABB=ON PLU=ON L25
L36 1159 SEA FILE=HCAPLUS ABB=ON PLU=ON L34
L37 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 AND L36
L38 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L37 NOT L20
L39 78489 SEA FILE=REGISTRY ABB=ON PLU=ON L15 NOT L19

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L40       21957 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L39
L41           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L38 AND L40


=> d ibib abs hitstr l41 1-2

L41  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2006:189352  HCAPLUS  Full-text
DOCUMENT NUMBER:          146:228673
TITLE:                    Product subclass 17: 1,1-Bis(nitrogen-functionalized)
                          alk-1-enes: alk-1-ene-1,1-diamines
AUTHOR(S):                Kantlehner, W.
CORPORATE SOURCE:         Germany
SOURCE:                   Science of Synthesis (2006), Volume Date 2005, 24,
                          571-705
                          CODEN: SSCYJ9
PUBLISHER:                Georg Thieme Verlag
DOCUMENT TYPE:            Journal; General Review
LANGUAGE:                 English
AB    A review of methods to prepare alk-1-ene-1,1-diamines.
IT    40657-29-2 154227-73-3 924905-33-9
      RL: RCT (Reactant); RACT (Reactant or reagent)
         (review of preparation of alkenediamines)
RN    40657-29-2  HCAPLUS
CN    3-Buten-2-one, 4,4-diethoxy-1,1,1-trifluoro-  (CA INDEX NAME)
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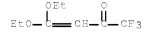

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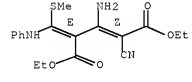
RN    154227-73-3  HCAPLUS
CN    2-Pentenedioic acid, 3-amino-2-cyano-4-[(methylthio)(phenylamino)methylene
      ]-, 1,5-diethyl ester, (2Z,4E)-  (CA INDEX NAME)

Double bond geometry as shown.
```



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RN    924905-33-9  HCAPLUS
CN    1H-Benzimidazole-2-acetonitrile, 1-methyl-α-[5-(trifluoromethyl)-2-
      pyridinyl]-  (CA INDEX NAME)
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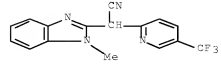
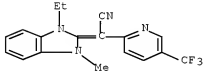


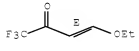
IT 144291-81-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(review of preparation of alkenediamines)
RN 144291-81-6 HCAPLUS
CN 2-Pyridineacetonitrile, α-(1-ethyl-1,3-dihydro-3-methyl-2H-benzimidazol-2-ylidene)-5-(trifluoromethyl)- (CA INDEX NAME)



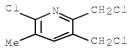
REFERENCE COUNT: 481 THERE ARE 481 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:406839 HCAPLUS Full-text
Correction of: 2005:155216
DOCUMENT NUMBER: 143:248209
Correction of: 142:197768
TITLE: Product class 1: pyridines
AUTHOR(S): Spitzner, D.
CORPORATE SOURCE: Germany
SOURCE: Science of Synthesis (2005), 15, 11-284
CODEN: SSCYJ9
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review of methods to prepare pyridines, pyridine-1-oxides, and pyridinium salts. Methods include cyclization, ring transformations, aromatization and substituent modification.
IT 59938-06-6 163459-12-9 244139-22-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of pyridines, pyridine-1-oxides and pyridinium salts via cyclization, ring transformations, aromatization and substituent modification)
RN 59938-06-6 HCAPLUS
CN 3-Buten-2-one, 4-ethoxy-1,1,1-trifluoro-, (3E)- (CA INDEX NAME)

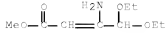
Double bond geometry as shown.



RN 163459-12-9 HCAPLUS
CN Pyridine, 2-chloro-5,6-bis(chloromethyl)-3-methyl- (CA INDEX NAME)

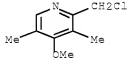


RN 244139-22-8 HCAPLUS
CN 2-Butenoic acid, 3-amino-4,4-diethoxy-, methyl ester (CA INDEX NAME)



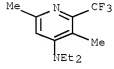
IT 53750-66-6P 84006-10-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of pyridines, pyridine-1-oxides and pyridinium salts via cyclization, ring transformations, aromatization and substituent modification)
RN 53750-66-6 HCAPLUS
CN 2-Pyridinecarbonyl chloride, 4-chloro- (CA INDEX NAME)

RN 84006-10-0 HCAPLUS
CN Pyridine, 2-(chloromethyl)-4-methoxy-3,5-dimethyl- (CA INDEX NAME)

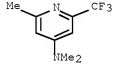


IT 3796-24-5P 54415-35-9P 54415-39-3P
122947-80-2P 137520-76-6P 137520-94-6P
166451-04-3P 178960-67-3P 216431-85-5P
267402-59-5P 725203-50-9P 743375-99-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of pyridines, pyridine-1-oxides and pyridinium salts via cyclization, ring transformations, aromatization and substituent modification)
RN 3796-24-5 HCAPLUS
CN Pyridine, 4-(trifluoromethyl)- (CA INDEX NAME)

RN 54415-35-9 HCAPLUS
CN 4-Pyridinamine, N,N-diethyl-3,6-dimethyl-2-(trifluoromethyl)- (CA INDEX NAME)

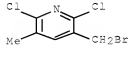


RN 54415-39-3 HCAPLUS
CN 4-Pyridinamine, N,N,2-trimethyl-6-(trifluoromethyl)- (CA INDEX NAME)

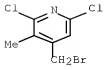


RN 122947-80-2 HCAPLUS
CN Pyridine, 4-(dichloromethyl)-3-nitro- (CA INDEX NAME)

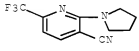
RN 137520-78-6 HCAPLUS
CN Pyridine, 3-(bromomethyl)-2,6-dichloro-5-methyl- (CA INDEX NAME)



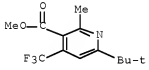
RN 137520-94-6 HCAPLUS
CN Pyridine, 4-(bromomethyl)-2,6-dichloro-3-methyl- (CA INDEX NAME)



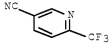
RN 166451-04-3 HCAPLUS
CN 3-Pyridinecarbonitrile, 2-(1-pyrrolidinyl)-6-(trifluoromethyl)- (CA INDEX NAME)



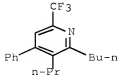
RN 178960-67-3 HCAPLUS
CN 3-Pyridinecarboxylic acid, 6-(1,1-dimethylethyl)-2-methyl-4-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



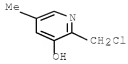
RN 216431-85-5 HCAPLUS
CN 3-Pyridinecarbonitrile, 6-(trifluoromethyl)- (CA INDEX NAME)



RN 267402-59-5 HCAPLUS
CN Pyridine, 2-butyl-4-phenyl-3-propyl-6-(trifluoromethyl)- (CA INDEX NAME)



RN 725203-50-9 HCAPLUS
CN 3-Pyridinol, 2-(chloromethyl)-5-methyl- (CA INDEX NAME)



RN 743375-99-7 HCAPLUS
CN 3-Pyridinol, 2-(chloromethyl)- (CA INDEX NAME)

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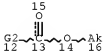
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 9

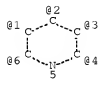
STEREO ATTRIBUTES: NONE
L15 78538 SEA FILE=REGISTRY SSS FUL L13
L16 STR

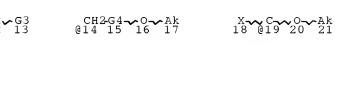


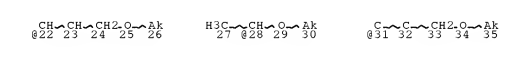
VAR G2=1/2/3/4/6
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE
L17 3306 SEA FILE=REGISTRY SUB=L15 SSS FUL L16
L18 STR







VAR G2=1/2/3/4/6
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REP G4=(0-2) CH2
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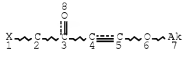
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 30

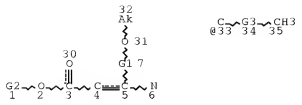
STEREO ATTRIBUTES: NONE
L19 49 SEA FILE=REGISTRY SUB=L17 SSS FUL L18
L20 20 SEA FILE=HCAPLUS ABB=ON PLU=ON L19
L23 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE
L25 488 SEA FILE=REGISTRY SSS FUL L23
L32 STR



REP G1=(1-3) C
VAR G2=ME/ET/I-PR/N-PR/I-BU/N-BU/T-BU/S-BU/33
REP G3=(3-4) C
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

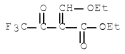
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L34	2316	SEA FILE=REGISTRY SSS FUL L32
L35	462	SEA FILE=HCAPLUS ABB=ON PLU=ON L25
L36	1159	SEA FILE=HCAPLUS ABB=ON PLU=ON L34
L37	5	SEA FILE=HCAPLUS ABB=ON PLU=ON L35 AND L36
L38	4	SEA FILE=HCAPLUS ABB=ON PLU=ON L37 NOT L20
L39	78489	SEA FILE=REGISTRY ABB=ON PLU=ON L15 NOT L19
L40	21957	SEA FILE=HCAPLUS ABB=ON PLU=ON L39
L41	2	SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND L40
L42	2	SEA FILE=HCAPLUS ABB=ON PLU=ON L38 NOT L41

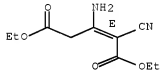
=> d ibib abs hitstr l42 1-2

L42 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:205964 HCAPLUS Full-text
DOCUMENT NUMBER: 142:74474
TITLE: Product class 12: pyrimidines
AUTHOR(S): von Angerer, S.
CORPORATE SOURCE: Germany
SOURCE: Science of Synthesis (2004), 16, 379-572
CODEN: SSCYJ9
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review. Methods for preparing pyrimidines are reviewed including cyclization, ring transformation, aromatization and substituent modification.
IT 571-55-1 89779-30-6 116952-62-6
145909-72-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of pyrimidines via cyclization, ring transformation, aromatization and substituent modification)
RN 571-55-1 HCAPLUS
CN Butanoic acid, 2-(ethoxymethylene)-4,4,4-trifluoro-3-oxo-, ethyl ester (CA INDEX NAME)



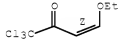
RN 89779-30-6 HCAPLUS
CN 2-Pentenedioic acid, 3-amino-2-cyano-, diethyl ester, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



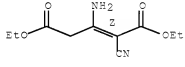
RN 116952-62-6 HCAPLUS
CN 3-Buten-2-one, 1,1,1-trichloro-4-ethoxy-, (3Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 145909-72-4 HCAPLUS
CN 2-Pentenedioic acid, 3-amino-2-cyano-, diethyl ester, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



REFERENCE COUNT: 856 THERE ARE 856 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

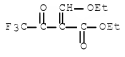
L42 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:855864 HCAPLUS Full-text
DOCUMENT NUMBER: 139:214344
TITLE: Product class 1: pyrazoles
AUTHOR(S): Stanovnik, B.; Svete, J.
CORPORATE SOURCE: Faculty of Chemistry and Chemical Technology, Division of Organic Chemistry, Ljubljana, 61000, Slovenia
SOURCE: Science of Synthesis (2002), 12, 15-225

CODEN: SSCYJ9
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

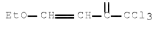
AB A review. Methods for preparing pyrazoles are reviewed including cyclization, ring transformation, aromatization and substituent modifications.

IT 571-55-1 83124-74-7 83124-77-0
83124-84-9 156519-20-9 208999-74-0
208999-81-9 246164-19-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of pyrazoles via cyclization, ring transformation, aromatization and substituent modifications)

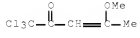
RN 571-55-1 HCAPLUS
CN Butanoic acid, 2-(ethoxymethylene)-4,4,4-trifluoro-3-oxo-, ethyl ester (CA INDEX NAME)



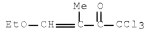
RN 83124-74-7 HCAPLUS
CN 3-Buten-2-one, 1,1,1-trichloro-4-ethoxy- (CA INDEX NAME)



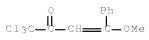
RN 83124-77-0 HCAPLUS
CN 3-Penten-2-one, 1,1,1-trichloro-4-methoxy- (CA INDEX NAME)



RN 83124-84-9 HCAPLUS
CN 3-Buten-2-one, 1,1,1-trichloro-4-ethoxy-3-methyl- (CA INDEX NAME)

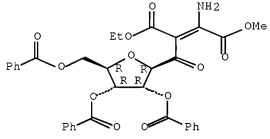


RN 156519-20-9 HCAPLUS
CN 3-Buten-2-one, 1,1,1-trichloro-4-methoxy-4-phenyl- (CA INDEX NAME)



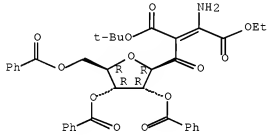
RN 208999-74-0 HCAPLUS
CN 2-Butenedioic acid, 2-amino-3-(2,5-anhydro-3,4,6-tri-O-benzoyl-D-allonoyl)-, 4-ethyl 1-methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



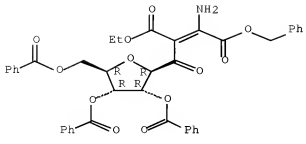
RN 208999-81-9 HCAPLUS
CN 2-Butenedioic acid, 2-amino-3-(2,5-anhydro-3,4,6-tri-O-benzoyl-D-allonoyl)-, 4-(1,1-dimethylethyl) 1-ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



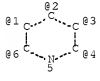
RN 246164-19-2 HCAPLUS
CN 2-Butenedioic acid, 2-amino-3-(2,5-anhydro-3,4,6-tri-O-benzoyl-D-allonoyl)-, 4-ethyl 1-(phenylmethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



REFERENCE COUNT: 909 THERE ARE 909 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> => d stat que 147
L13 STR



VAR G2=1/2/3/4/6
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE
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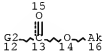
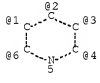
L16 STR





VAR G2=1/2/3/4/6
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE
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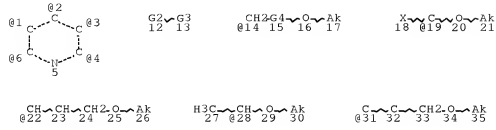
L18 STR



VAR G2=1/2/3/4/6
VAR G3=14/19/22/28/31
REP G4=(0-2) CH2
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 30

STEREO ATTRIBUTES: NONE
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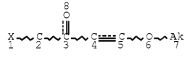
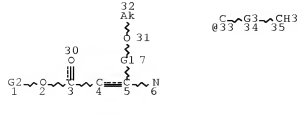
L20 20 SEA FILE=HCAPLUS ABB=ON PLU=ON L19
L23 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE
L25 488 SEA FILE=REGISTRY SSS FUL L23
L32 STR



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REP G1=(1-3) C
VAR G2=ME/ET/I-PR/N-PR/I-BU/N-BU/T-BU/S-BU/33
REP G3=(3-4) C
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  13

STEREO ATTRIBUTES: NONE
L34         2316 SEA FILE=REGISTRY SSS FUL L32
L35          462 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L25
L36         1159 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L34
L37            5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L35 AND L36
L38            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L37 NOT L20
L39        78489 SEA FILE=REGISTRY ABB=ON  PLU=ON  L15 NOT L19
L40        21957 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L39
L41            2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L38 AND L40
L42            2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L38 NOT L41
L43          373 SEA FILE=HCAPLUS ABB=ON  PLU=ON  JACKSON D/AU OR JACKSON D
                 A/AU OR JACKSON DAVID/AUJACKSON DAVID A/AU OR JACKSON DAVID A
                 JR/AU OR JACKSON DAVID ANTHONY/AU
L44           79 SEA FILE=HCAPLUS ABB=ON  PLU=ON  BOWDEN M/AU OR BOWDEN M C/AU
                 OR BOWDEN MARTIN/AU OR BOWDEN MARTIN C?/AU
L45            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L43 AND L44
L46            5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L43 OR L44) AND (L35 OR L36
                 OR L40)
L47            5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L45 OR L46) NOT (L20 OR L41
                 OR L42)


=> d ibib abs hitstr l47 1-5

L47  ANSWER 1 OF 5  HCAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2005:1196196  HCAPLUS  Full-text
DOCUMENT NUMBER:          143:459878
TITLE:                    Multi-step process for the production of cyclic
                          diketones
INVENTOR(S):              Jackson, David Anthony; Edmunds, Andrew; Bowden,
                          Martin Charles; Brockbank, Ben
PATENT ASSIGNEE(S):       Syngenta Participations AG, Switz.; Syngenta Limited
SOURCE:                   PCT Int. Appl., 34 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
     WO 2005105745        A1    20051110    WO 2005-EP4681         20050429
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
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NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
MR, NE, SN, TD, TG

AU 2005238195	A1	20051110	AU 2005-238195		20050429
EP 1756059	A1	20070228	EP 2005-741812		20050429
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CN 1950339	A	20070418	CN 2005-80013706		20050429
BR 2005010502	A	20071030	BR 2005-10502		20050429
JP 2007535516	T	20071206	JP 2007-509989		20050429
US 20070232837	A1	20071004	US 2006-568337		20061026
IN 2006CN04011	A	20070810	IN 2006-CN4011		20061101
PRIORITY APPLN. INFO.:			CH 2004-765	A	20040430
			WO 2005-EP4681	W	20050429

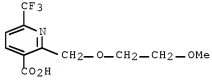
OTHER SOURCE(S): CASREACT 143:459878; MARPAT 143:459878

AB A multi-step process for the preparation of cyclic diketones [e.g., 4-(4-chlorophenylcarbonyloxy)bicyclo[3.2.1]oct-3-en-2-one] is presented.

IT 380355-55-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(in a multi-step process for the production of cyclic diketones)

RN 380355-55-5 HCAPLUS

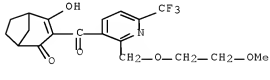
CN 3-Pyridinecarboxylic acid, 2-[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)- (CA INDEX NAME)



IT 352010-68-5P 380355-62-4P 869089-17-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(multi-step process for the production of cyclic diketones)

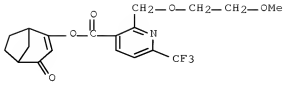
RN 352010-68-5 HCAPLUS

CN Bicyclo[3.2.1]oct-3-en-2-one, 4-hydroxy-3-[[2-[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)-3-pyridinyl]carbonyl]- (CA INDEX NAME)

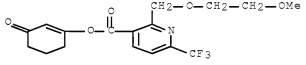


RN 380355-62-4 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)-, 4-oxobicyclo[3.2.1]oct-2-en-2-yl ester (CA INDEX NAME)



RN 869089-17-8 HCAPLUS
CN 3-Pyridinecarboxylic acid, 2-[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)-, 3-oxo-1-cyclohexen-1-yl ester (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1196142 HCAPLUS Full-text
DOCUMENT NUMBER: 143:459877
TITLE: Process for the production of cyclic diketones
INVENTOR(S): Jackson, David Anthony; Edmunds, Andrew; Bowden, Martin Charles; Brockbank, Ben
PATENT ASSIGNEE(S): Syngenta Participations A.-G., Switz.; Syngenta Limited
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005105718	A2	20051110	WO 2005-EP4680	20050429
WO 2005105718	A3	20060504		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2005238194	A1	20051110	AU 2005-238194		20050429
CA 2562152	A1	20051110	CA 2005-2562152		20050429
EP 1740524	A2	20070110	EP 2005-738471		20050429
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR					
CN 1950319	A	20070418	CN 2005-80013809		20050429
BR 2005010492	A	20071113	BR 2005-10492		20050429
JP 2007535515	T	20071206	JP 2007-509988		20050429
MX 2006PA12161	A	20070117	MX 2006-PA12161		20061020
KR 2007008671	A	20070117	KR 2006-722687		20061030
IN 2006CN04021	A	20070810	IN 2006-CN4021		20061101
US 20080139816	A1	20080612	US 2007-568077		20070928
PRIORITY APPLN. INFO.:			CH 2004-766	A	20040430
			WO 2005-EP4680	W	20050429

OTHER SOURCE(S): CASREACT 143:459877; MARPAT 143:459877

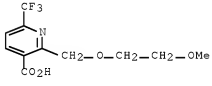
AB A process for the preparation of cyclic diketones [e.g., 4-(4-chlorophenylcarbonyloxy)bicyclo[3.2.1]oct-3-en-2-one] is presented.

IT 380355-55-5

RL: RCT (Reactant); RACT (Reactant or reagent)
(in a process for the production of cyclic diketones)

RN 380355-55-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)- (CA INDEX NAME)

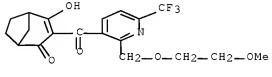


IT 352010-68-5P 380355-62-4P 869089-17-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(process for the production of cyclic diketones)

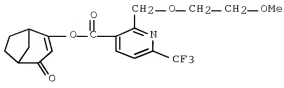
RN 352010-68-5 HCAPLUS

CN Bicyclo[3.2.1]oct-3-en-2-one, 4-hydroxy-3-[[2-[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)-3-pyridinyl]carbonyl]- (CA INDEX NAME)

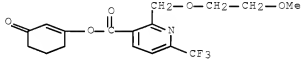


RN 380355-62-4 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)-, 4-oxobicyclo[3.2.1]oct-2-en-2-yl ester (CA INDEX NAME)



RN 869089-17-8 HCAPLUS
CN 3-Pyridinecarboxylic acid, 2-[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)-, 3-oxo-1-cyclohexen-1-yl ester (CA INDEX NAME)



L47 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1195899 HCAPLUS Full-text
DOCUMENT NUMBER: 143:459792
TITLE: Bromination and oxidative debromination process for the preparation of cyclic diketones from cycloalkenes
INVENTOR(S): Jackson, David Anthony; Edmunds, Andrew; Bowden, Martin Charles; Brockbank, Ben
PATENT ASSIGNEE(S): Syngenta Participations A.-G., Switz.; Syngenta Limited
SOURCE: PCT Int. Appl., 16 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005105717	A1	20051110	WO 2005-EP4655	20050429
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: CH 2004-764 A 20040430
OTHER SOURCE(S): CASREACT 143:459792; MARPAT 143:459792
AB A bromination and oxidative debromination process for the preparation of cyclic diketones (e.g., bicyclo[3.2.1]octane-2,4-dione) from cycloalkenes

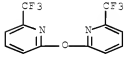
(e.g., bicyclo[3.2.1]oct-2-ene), in which bromination of a cycloalkene followed by treatment of the brominated intermediate (e.g., 2,4,4-tribromobicyclo[3.2.1]oct-2-ene) with an aqueous solution of an acid or a base, is presented.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

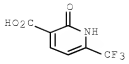
L47 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:565052 HCAPLUS Full-text
DOCUMENT NUMBER: 127:207250
ORIGINAL REFERENCE NO.: 127:40253a,40256a
TITLE: 6-(Trifluoromethyl)pyrid-2-one: development and scale-up of a ring synthesis route based on trifluoroacetic anhydride
AUTHOR(S): Brown, Stephen M.; Bowden, Martin C.; Parsons, Tracy J.; McNeilly, P.; de Fraine, Paul J.
CORPORATE SOURCE: Process Technology Department, Zeneca Limited, Huddersfield, HD2 1FF, UK
SOURCE: Organic Process Research & Development (1997), 1(5), 370-378
CODEN: OPRDFK; ISSN: 1083-6160
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Three routes to 6-(trifluoromethyl)-2-pyridone involving de novo synthesis of the pyridine ring have been investigated which would potentially allow rapid semi-tech. scale manufacture A route starting from Et 4,4,4-trifluoroacetoacetate (β-keto ester route) has been demonstrated. Development of the route was attempted; however, poor yields at a number of stages and scale-up difficulties made this route unattractive for com. use. A four-stage route starting from trifluoroacetic anhydride and Et vinyl ether has been developed which gives good yields and productivity for all stages. The final stage of this route is a difficult decarboxylation of a nicotinic acid derivative, but an 80% yield of the required pyridone with a purity of >99.5% could be achieved without a sep. purification stage. The route was scaled up to 2 kL, and several hundred kilograms of product was prepared

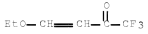
IT 194673-14-8P, Bis[6-(trifluoromethyl)-2-pyridyl] ether
RL: BYP (Byproduct); PREP (Preparation)
(byproduct; trifluoromethylpyridone production by ring synthesis route)
RN 194673-14-8 HCAPLUS
CN Pyridine, 2,2'-oxybis[6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



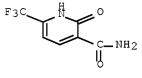
IT 191595-63-8P, 3-Carboxy-6-(trifluoromethyl)-2-pyridone
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(intermediate; trifluoromethylpyridone production by ring synthesis route)
RN 191595-63-8 HCAPLUS
CN 3-Pyridinecarboxylic acid, 1,2-dihydro-2-oxo-6-(trifluoromethyl)- (CA INDEX NAME)



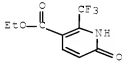
IT 17129-66-5P 116548-03-9P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; trifluoromethylpyridone production by ring synthesis route)
RN 17129-06-5 HCAPLUS
CN 3-Buten-2-one, 4-ethoxy-1,1,1-trifluoro- (CA INDEX NAME)



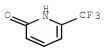
RN 116548-03-9 HCAPLUS
CN 3-Pyridinecarboxamide, 1,2-dihydro-2-oxo-6-(trifluoromethyl)- (CA INDEX NAME)



IT 194673-13-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; trifluoromethylpyridone production by ring synthesis route)
RN 194673-13-7 HCAPLUS
CN 3-Pyridinecarboxylic acid, 1,6-dihydro-6-oxo-2-(trifluoromethyl)-, ethyl ester (CA INDEX NAME)



IT 34486-06-1P, 6-(Trifluoromethyl)-2-pyridone
RL: IMF (Industrial manufacture); PREP (Preparation)
(production by ring synthesis route based on trifluoroacetic anhydride)
RN 34486-06-1 HCAPLUS
CN 2(1H)-Pyridinone, 6-(trifluoromethyl)- (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:461426 HCAPLUS Full-text
DOCUMENT NUMBER: 127:65687
ORIGINAL REFERENCE NO.: 127:12559a,12562a
TITLE: Process for the preparation of 6-Trifluoro-, 6-chlorodifluoro- and 6-difluoromethyl-2-hydroxypyridine by decarboxylating nicotinic acid derivs.
INVENTOR(S): De Fraine, Paul John; Bowden, Martin Charles; Mcneilly, Patrick
PATENT ASSIGNEE(S): Zeneca Limited, UK
SOURCE: Brit. UK Pat. Appl., 18 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
GB 2305174	A	19970402	GB 1996-19011		19960911
PRIORITY APPLN. INFO.:			GB 1995-18897	A	19950915
			GB 1996-2622	A	19960209

OTHER SOURCE(S): CASREACT 127:65687

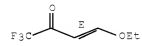
AB 6-Trifluoro-, 6-chlorodifluoro- and 6-difluoromethyl-2-hydroxypyridines are prepared by decarboxylating the corresponding nicotinic acid at a temperature above 190℃ at normal atmospheric pressure. 6-Trifluoro-, 6-chlorodifluoro- and 6-difluoromethyl-2-hydroxy-nicotinic acids are novel compds. and are prepared by hydrolyzing the corresponding nicotinic acid ester or amide or the corresponding nitrile. Thus, 2949 g of quinoline and 2710 g of 2-hydroxy-6-trifluoromethyl nicotinic acid were charged to a split-neck reaction flask fitted with a reflux condenser and thermometer and while agitating heated to 235℃. The reaction liquors were held for 4 h at 235℃ while decarboxylation was monitored. Toluene, water, and caustic soda were added and the liquors were repeatedly agitated, filtered, and allowed to settle for separation until HCl was added to precipitate 83.5% yield of desired product 2-hydroxy-6-trifluoromethylpyridine. The pyridines are useful chemical intermediates in the preparation of agricultural products. A process for the preparation of a intermediate compound of formula CF2XCOCH=CHOR3 is also disclosed.

IT 59938-06-6P 116548-02-8P 116548-03-9P, 2-Hydroxy-6-trifluoromethylnicotinamide 116548-04-0P 170118-79-3P 191595-63-9P, 2-Hydroxy-6-trifluoromethylnicotinic acid 191595-67-2P 191595-68-3P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(process for preparation of 6-Trifluoro-, 6-chlorodifluoro- and 6-difluoromethyl-2-hydroxypyridine by decarboxylating nicotinic acid derivs.)

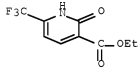
RN 59938-06-6 HCAPLUS

CN 3-Buten-2-one, 4-ethoxy-1,1,1-trifluoro-, (3E)- (CA INDEX NAME)

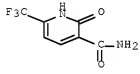
Double bond geometry as shown.



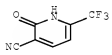
RN 116548-02-8 HCAPLUS
CN 3-Pyridinecarboxylic acid, 1,2-dihydro-2-oxo-6-(trifluoromethyl)-, ethyl ester (CA INDEX NAME)



RN 116548-03-9 HCAPLUS
CN 3-Pyridinecarboxamide, 1,2-dihydro-2-oxo-6-(trifluoromethyl)- (CA INDEX NAME)

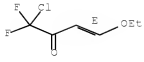


RN 116548-04-0 HCAPLUS
CN 3-Pyridinecarbonitrile, 1,2-dihydro-2-oxo-6-(trifluoromethyl)- (CA INDEX NAME)

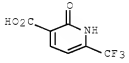


RN 170118-79-3 HCAPLUS
CN 3-Buten-2-one, 1-chloro-4-ethoxy-1,1-difluoro-, (3E)- (CA INDEX NAME)

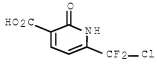
Double bond geometry as shown.



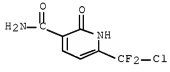
RN 191595-63-8 HCAPLUS
CN 3-Pyridinecarboxylic acid, 1,2-dihydro-2-oxo-6-(trifluoromethyl)- (CA INDEX NAME)



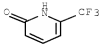
RN 191595-67-2 HCAPLUS
CN 3-Pyridinecarboxylic acid, 6-(chlorodifluoromethyl)-1,2-dihydro-2-oxo- (CA INDEX NAME)



RN 191595-68-3 HCAPLUS
CN 3-Pyridinecarboxamide, 6-(chlorodifluoromethyl)-1,2-dihydro-2-oxo- (CA INDEX NAME)



IT 34486-06-1P, 2-Hydroxy-6-trifluoromethylpyridine
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(process for preparation of 6-Trifluoro-, 6-chlorodifluoro- and 6-difluoromethyl-2-hydroxypyridine by decarboxylating nicotinic acid derivs.)
RN 34486-06-1 HCAPLUS
CN 2(1H)-Pyridinone, 6-(trifluoromethyl)- (CA INDEX NAME)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L38              4 SEA ABB=ON  PLU=ON  L37 NOT L20

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L45              4 SEA ABB=ON  PLU=ON  L43 AND L44
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L47              5 SEA ABB=ON  PLU=ON  (L45 OR L46) NOT (L20 OR L41 OR L42)
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                   D IBIB ABS HITSTR L47 1-5


     FILE HOME

     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
     provided by InfoChem.

     STRUCTURE FILE UPDATES:   27 AUG 2008  HIGHEST RN 1044280-23-0
     DICTIONARY FILE UPDATES:  27 AUG 2008  HIGHEST RN 1044280-23-0
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TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

FILE HCAPLUS

FILE COVERS 1907 - 29 Aug 2008 VOL 149 ISS 10
FILE LAST UPDATED: 28 Aug 2008 (20080828/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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